THE PORT OF NEW YORK

MANHATTAN NORTH RIVER DEVELOPMENT PLAN

TO THE YEAR 2000

DEPARTMENT
OF
MARINE AND AVIATION
CITY OF NEW YORK

THE PORT OF NEW YORK

MANHATTAN
NORTH RIVER DEVELOPMENT PLAN
STUDY TEAM

CITY OF NEW YORK

Department of Marine and Aviation

HONORABLE LEO BROWN, *Commissioner*

WALTER B. COLEMAN, *Deputy Commissioner*
ROY T. COWDREY, *General Manager*
EVAN M. HOUSEMAN, *Director of Port Promotion*
WILLIAM SEABROOK, *Director of Public Information*

LEONARD N. COHEN, *Deputy Commissioner*
LEWIS H. RABBAGE, *Chief Engineer*
EDWARD J. SMITH, Deputy Chief Engineer
ROBERT J. KANE, *Project Engineer*

BERNARD HANDWERKER, *Executive Director, N.Y.C. Council on Port Development & Promotion*

HONORABLE VINCENT A. G. O'CONNOR, *(Former) Commissioner*
ROBERT H. MEADE, *(Former) Consulting Engineer*

EBASCO SERVICES INCORPORATED

MANAGEMENT CONSULTANTS

RICHARD L. FORSTER
WILLIAM A. BARRETT, JR.
JOHN L. GRIMES, *Project Director*
DR. HERBERT B. DORAU, *Economist*

DEAN K. BOORMAN
WILLIAM W. HANNON
EDWARD F. CASEY
IAN C. BELL

MORAN, PROCTOR, MUESER & RUTLEDGE

Consulting Engineers

CONSULTING ENGINEERS

ROBERT C. JOHNSTON
WILLIAM H. MUESER
JAMES P. GOULD
MAX BERNHEIMER
ANTHONY C. BETTS

EGGERS AND HIGGINS

ARCHITECTS

THEODORE J. YOUNG
BRADFORD N. CLARK
ALLEN R. CONGDON
PAUL LAMPL

THE MAYOR'S ANNOUNCEMENT

Ex Libris
SEYMOUR DURST

HONORABLE ROBERT F. WAGNER
Mayor of The City of New York

The long-range plan for the self-sustaining and self-liquidating redevelopment of Manhattan's entire North River waterfront from the Battery to 72nd Street was announced by Mayor Wagner on April 26, 1963.

This was a highpoint in Mayor Wagner's administration which, since its beginning in 1954, has done more for the City's main bloodstream of economic life, its waterfront, than was accomplished in the whole of New York's maritime history.

The North River Study followed closely upon the heels of the $200,000,000 Waterfront Rebuilding Program, which saw some two dozen major projects successfully completed or initiated; the substantial advancement of a $40,000,000 Lower Manhattan East River Redevelopment Plan and the Waterfront Redevelopment of Stapleton, S. I., Study.

"I believe," the Mayor said," that the North River Development Plan is one of the most exciting and significant undertakings of its kind. It would provide the Port with the most modern cargo and passenger-ship facilities in the world, while opening up new horizons to advance the City's growth.

"The cost of the vast North River program is approximately $670,000,000, broken down into two parts. For strictly maritime uses, $200,000,000 would be expended over the next four decades. All these facilities will be self-sustaining and independent of the City's debt limitations.

"The multiple use feature, the construction of hotels, motels, apartment, office and industrial buildings in conjunction with installations devoted to waterfront commerce, which amounts to an estimated $468,000,000, would be financed by private investors. Phased over the forty-year period, the annual average would be less than $17,000,000, while the return would contribute substantially in the City's economic growth."

INTRODUCTION

HONORABLE LEO BROWN

Commissioner of Marine and Aviation, City of New York

This brochure is a digest of the Manhattan North River Development Plan for those who wish to study it in abbreviated form. The study itself took one-and-a-half years to complete, and its size and weight (nine-and-a-half pounds) permits it only to be carried around by a Paul Bunyan. Three firms of prominent consultants worked on it (see inside cover) and it cost $300,000. It is one of the most comprehensive and searching analyses ever made of the Port of New York or of any other port, and it introduces a whole new concept in the multiple use of waterfront property. The consultants examined data for the past 400 years. An economic and statistical survey was made of the entire harbor to ascertain cargo and passenger trends. Projections were then made to the year 2000. The impact of competitive North Atlantic and Gulf ports was also carefully analyzed.

The selection of possible sites for all maritime facilities, and compatible facilities such as office, residential and shopping areas; restaurants; sightseeing; and convention and recreational facilities, was based on an exhaustive study of functional, economic, engineering and architectural factors. The study included a thorough evaluation of geological and other data on the indicated six-odd miles to determine the optimum locations and types of structures.

The "recovery" of nearly a square mile of land from the Hudson River is one of the many unique features of the plan. The development takes into account not only recent innovations in transportation and engineering design, but looks ahead to the use of nuclear-powered, hydrofoil and surface-effect vessels which could open up new commuter areas and, with more extensive heliports and helistops, forge new links in the metropolitan transportation network.

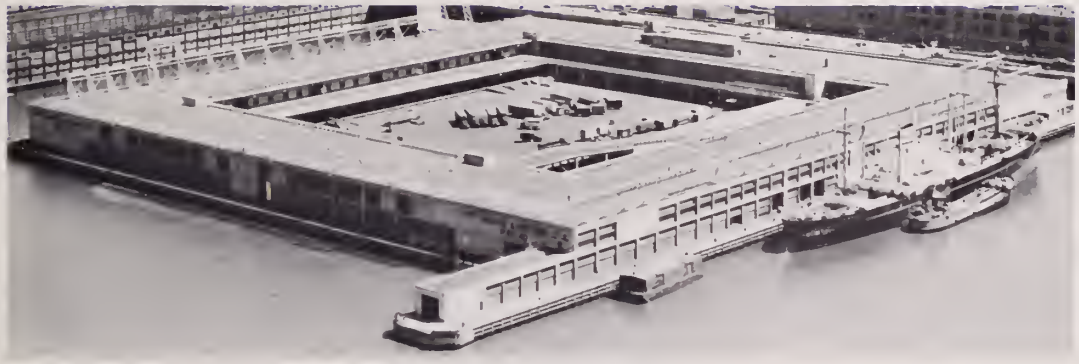
The plan divides the North River waterfront and upland region into nine major areas or divisions, varying in size from twelve to 122 acres. The proposed uses are entirely compatible with their past historical development. The plan is also compatible with new and proposed pier construction along the North River and with proposed developmental trends on the upland.

A prime objective of the study was the modernization of existing passenger ship terminal facilities (Area VII, pages 14 and 15). A startling proposal is that for a new "Downtown City" to be located between the Battery and Chambers Street (Area I, pages 4 and 5). Another is a Sightseeing and Convention Center, to adjoin 42nd Street and the midtown theatre district (Area VI, pages 12 and 13).

Also illustrated are three Cargo-Handling and Distribution Complexes in the downtown, midtown and uptown areas (Areas II, III, V and IX).

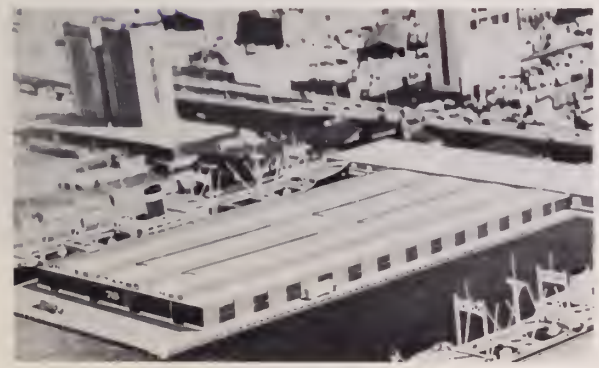
In addition to these major areas, provision is made for the complete modernization of municipal service installations and for two alternate areas which are described in the text and indicated on the overall North River aerial photo reproduced on pages 8 and 9 (Areas IV, VIII and IX).

RECENT NEW CONSTRUCTION ON NORTH RIVER TO BE INTEGRATED IN NORTH RIVER DEVELOPMENT PLAN



PIER 40, HOLLAND-AMERICA LINE

Completed in October, 1962, $19,750,000 passenger and freight terminal, built by the City of New York and leased to the Holland-America Line, is largest facility of its kind in the U.S. A prototype of modern terminal design, it will become part of Area II.

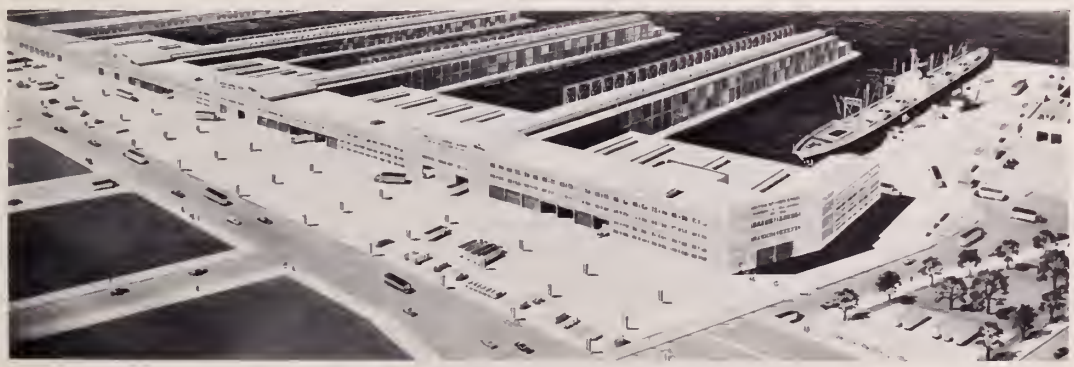


PIER 76, UNITED STATES LINES

Under construction for United States Lines at West 35th-37th Streets, this $8,500,000 cargo terminal will become an integral part of the Midtown Distribution Center (Area V).

PIER 94, CUNARD STEAM-SHIP CO., LTD.

Also presently under construction, Pier 94 will be part of Area VII. Costing $5,000,000, it will be linked with Pier 92, permitting Cunard Line to consolidate all its activities in one convenient area.



PIERS 59, 60, 61, 62, UNITED STATES LINES

Architects' rendering of $25,000,000 project (including Pier 76) of four Chelsea piers which is already under way, with containerized pier (Pier 62, right) almost completed. These modernized facilities will be integrated into Midtown Distribution Center. (Area V)

NEW DOWNTOWN CITY AREA

LOCATION & EXTENT: Extends north from Battery to Chambers Street – 4,790 feet long, 84.9 gross acres. About ¾ of Area I, or 64.3 acres, is on "new" land, requiring about 5 million cubic yards of fill.

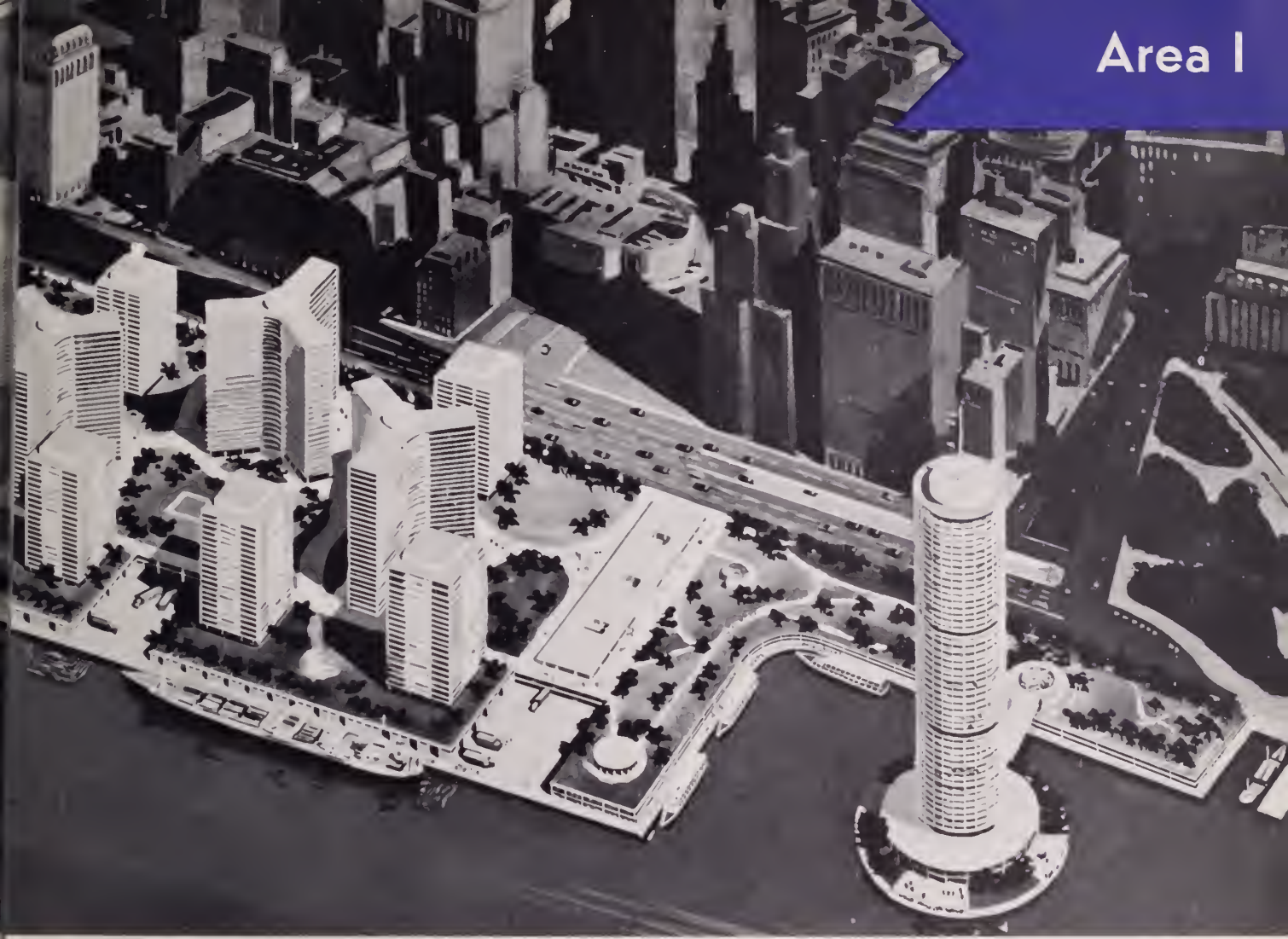
PROPOSED USE: Multiple use of land for wharf facilities, office buildings, apartments, hotel, motel, shopping sections, restaurants, excursion boat and yacht basin, municipal and other service facilities, landscaped public parks and malls. Planning is compatible with other proposed developmental trends in Area, including World Trade Center.

AREA HIGHLIGHTS: Wharf operations (including trucking) are completely separated from non-cargo activities which are on concrete deck 25 feet above level of West Street.

WHARF FACILITIES: 6 cargo berths along river periphery with sheds 500 feet long by 180 feet wide, spaced 150 feet apart. Ample maneuvering area for trucks. Wharf traffic isolated from thru-traffic on marginal street (West Street).

Office Buildings and Parking: 4.4 million gross square feet of new office space in 8 buildings; Four 30-story buildings along West Street side; four 25-story buildings over cargo sheds on river side. Each on 100′ x 200′ site; unexcelled view of harbor and Lower Manhattan. Parking underneath for nearly 5,000 cars.

Apartments: 18 apartment buildings, providing total of 4,000 new apartments: 10 buildings along river front; 3 more interspersed among 5 additional "Y"-shaped apartment buildings at south end of Area.



Area I

The Battery to Chambers Street

Hotel: At extreme southerly tip of Area, on "island" created offshore, a 40-story "cylindrical" hotel, reached by short bridge from "mainland." 600 rooms. Also on "island": restaurant, meeting rooms, parking facilities, etc. and facilities for yachts.

Supporting Services: Fireboat station near hotel. Docks at south end, near hotel for excursion boats and yachts. Stores (staples, household goods, etc.) at north and south ends of Area. Restaurant at north and south ends of Area, adjacent to park areas and walks.

Motel: Strategically located at extreme north end of Area, foot of Chambers Street and convenient to proposed World Trade Center, 6 floors, 250 rooms; parking for 400 cars.

CONSTRUCTION: Entire area built on recovered land with a concrete second deck 25 feet above ground level. Foundations would be supported on bedrock (located at average of 47 feet below mean water level in this area). Landscaped throughout to create attractive malls and parks for resident and public use.

COST: Cost of creating "new" raw land and bulkhead, $8.30 per sq. ft. (1962 value) which is substantially less than current cost of inland property. Projects in the Area to be self-sustaining. Expected to produce increased revenue for the City, bring new business to the Area.

Estimated construction costs: $16,500,000 for maritime uses; $304,000,000 for other uses (1962 values).

PHASING: Flexible planning allows for orderly development over a period of years consistent with the uesful, economic life of existing waterfront structures.

DOWNTOWN DISTRIBUTION CENTER

Chambers Street to Morton Street

LOCATION & EXTENT: Area II extends 5,270 feet from Chambers Street to Morton Street, covers 115 gross acres and includes the recently completed Pier 40 at West Houston Street as an integral part of the plan.

PROPOSED USE: Area II is the southern portion of the large vital "Downtown Distribution Center," which, together with Area III, comprises the Lower Manhattan transportation hub with direct connections in the vicinity of Canal Street.

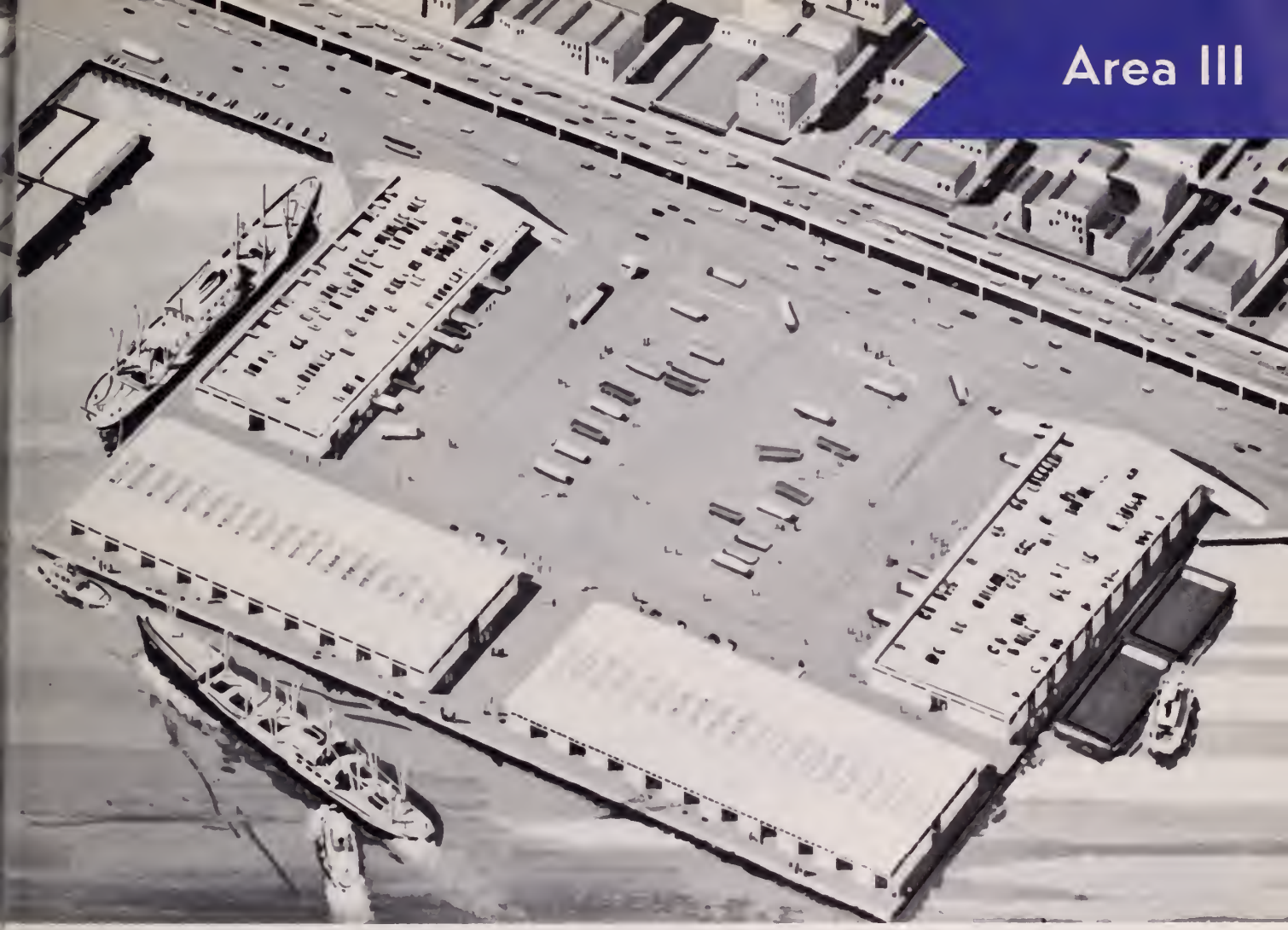
AREA HIGHLIGHTS: Modern cargo terminals are designed to allow all related cargo operations to be performed within the terminal shed and farm area clear of the marginal street. Ten new, modern cargo berths with ample space for required sheds and farm area, in addition to the three excellent berths now at Pier 40, are planned to replace the fourteen existing outdated finger piers. Pier development will result in 3,375,000 square feet of new concrete pier deck, supported on piling and extending out 840 feet from the bulkhead line. In addition to the modern Pier 40, about 630,000 square feet of new piershed area will be provided.

Berth lengths vary from 600 feet to 800 feet and anticipate future trends in ship design. Slip widths in the Area range from 350 feet to 400 feet. The marginal wharf is located 100 feet inshore of the pierhead line to permit ship berthing.

Piersheds to have the most modern and flexible design: minimum number of columns; optimum clear height and wide aprons, tail-gate height truck-loading and unloading; modern lighting and fire protection. All cargo handling will be carried on within the piershed or pier farm area. Automobile parking to be adjacent to area or on piershed roofs with ramps from ground level near widened marginal way for direct access.

COST: Estimated construction costs $45,000,000 (1962 value) for maritime use.

PHASING: Carefully phased program protects all of the City's current assets by replacing existing structures on the termination of their economic and useful life. Pier 40, the first completed unit of this Downtown Cargo Distribution Center, was dedicated on October 24, 1962.



Area III

DOWNTOWN DISTRIBUTION CENTER Morton Street to Gansevoort Street

LOCATION & EXTENT: Area III extends 2,900 feet from Morton Street to Gansevoort Street, covering 54.2 gross acres. Area III is the northern portion of the large, vital "Downtown Distribution Center" which, together with Area II, comprises the Lower Manhattan transportation hub with direct connections by widened streets in Lower Manhattan.

AREA HIGHLIGHTS: Modern cargo terminals are designed to allow all related cargo operations to be performed within the terminal shed and area, away from the marginal street. Provides for six new modern cargo berths with ample space for required sheds and farm area. In addition, an industrial area is included in Area III.

Pier development will result in 1,720,000 square feet of new land accommodating 4 cargo sheds and a 4-story building complex planned inshore of cargo operations and designed for light industry and storage.

Light Industrial and Storage Building: The core arrangement of the light industrial building allows complete flexibility in the layout of the three rentable floors which have a total gross area of 1,320,000 square feet.

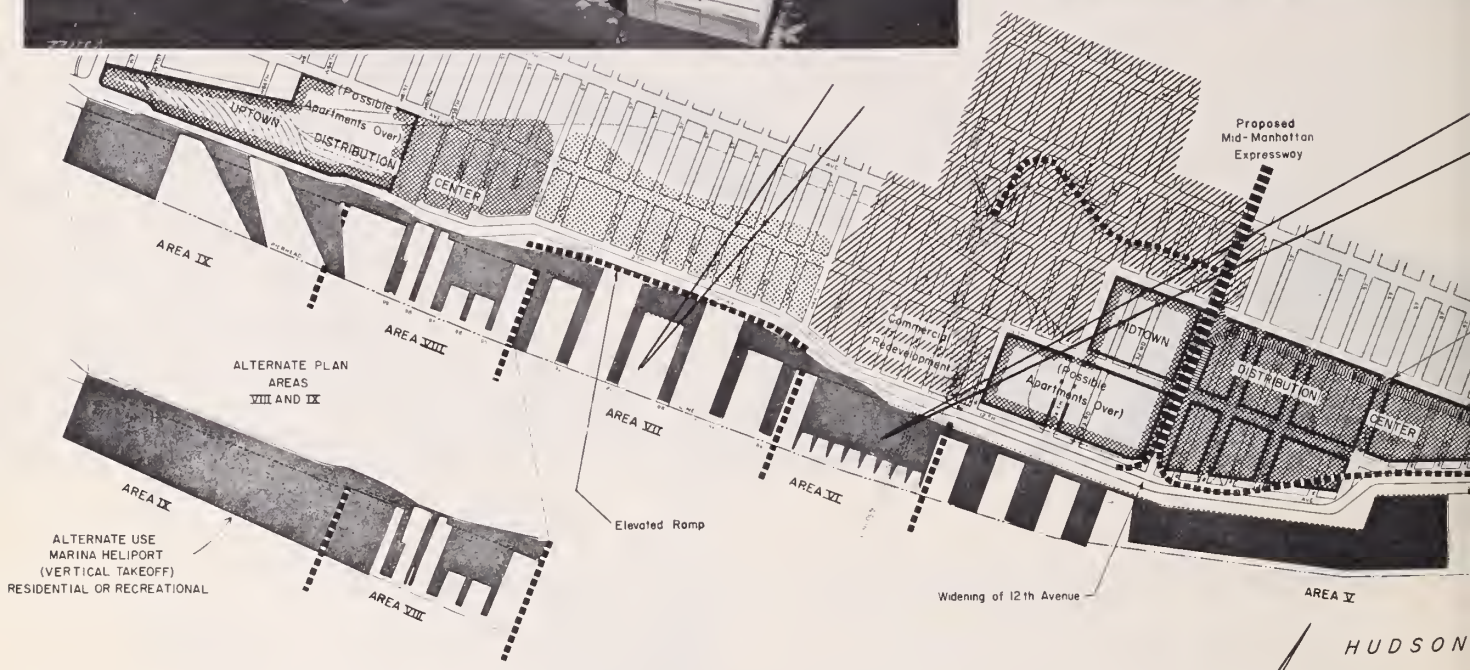
Office Buildings: There are two multi-story office buildings with 25 rentable floors each and a total gross area of 1,050,000 square feet to serve the requirements of the wharves and the manufacturing center. The ground floor provides for building access, lobbies, mechanical space, parking, truck-loading berths.

Wharf Facilities: The proposed general cargo berths are as follows: 6 berths, 4 piersheds. Berth lengths vary from 600′ to 750′ and anticipate future trends in ship design. Slip widths of 350′. Marginal wharf 100′ inside pierhead line for ship berthing. Piersheds of the most modern and flexible design with minimum number of columns, tail-gate height truck-loading and unloading; modern lighting; optimum clear height and width of aprons; and fire protection. All cargo will be handled within the piershed and farm area. Automobile parking will be provided under the industrial facility or on the roofs of the proposed passenger terminals.

CONSTRUCTION: New area (1,720,000 square feet) will be supported by land fill. Land fill and deck will extend to within 100 feet of the pierhead line.

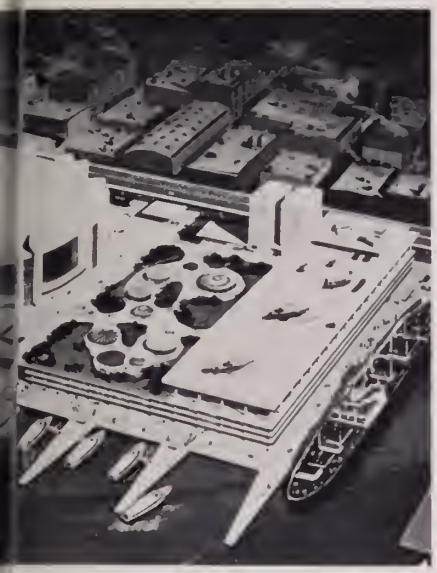
COST: Estimated construction costs: $11,000,000 (1962 value) for maritime uses; $51,000,000 for other uses.

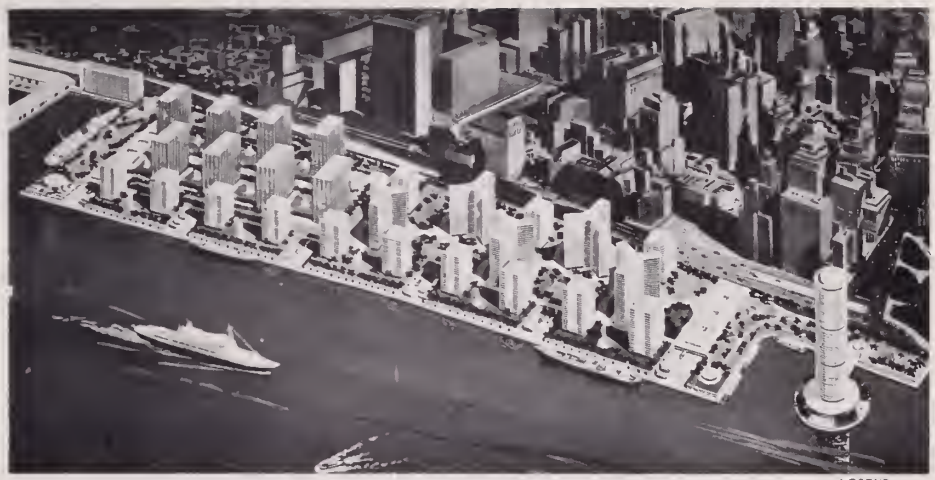
PHASING: A carefully phased program protects all the City's current assets by replacing existing structures on the termination of their useful life.



THE M

NORTH RIVER





LEGEND

- Distribution Centers
- Industrial
- Commercial
- Residential
- Public

Superblocks With Widened Boundary Streets

Proposed Expressway

Possible Right-of-Way Extens

Meat Market

Possible Right-of-Way Possible Truck Route

DOWNTOWN

DISTRIBUTION CENTER

Proposed World Trade Center

AREA IV

AREA III

AREA II

AREA I

Double-Decking of Highway — Possible Truck Route

Widening of West Streets

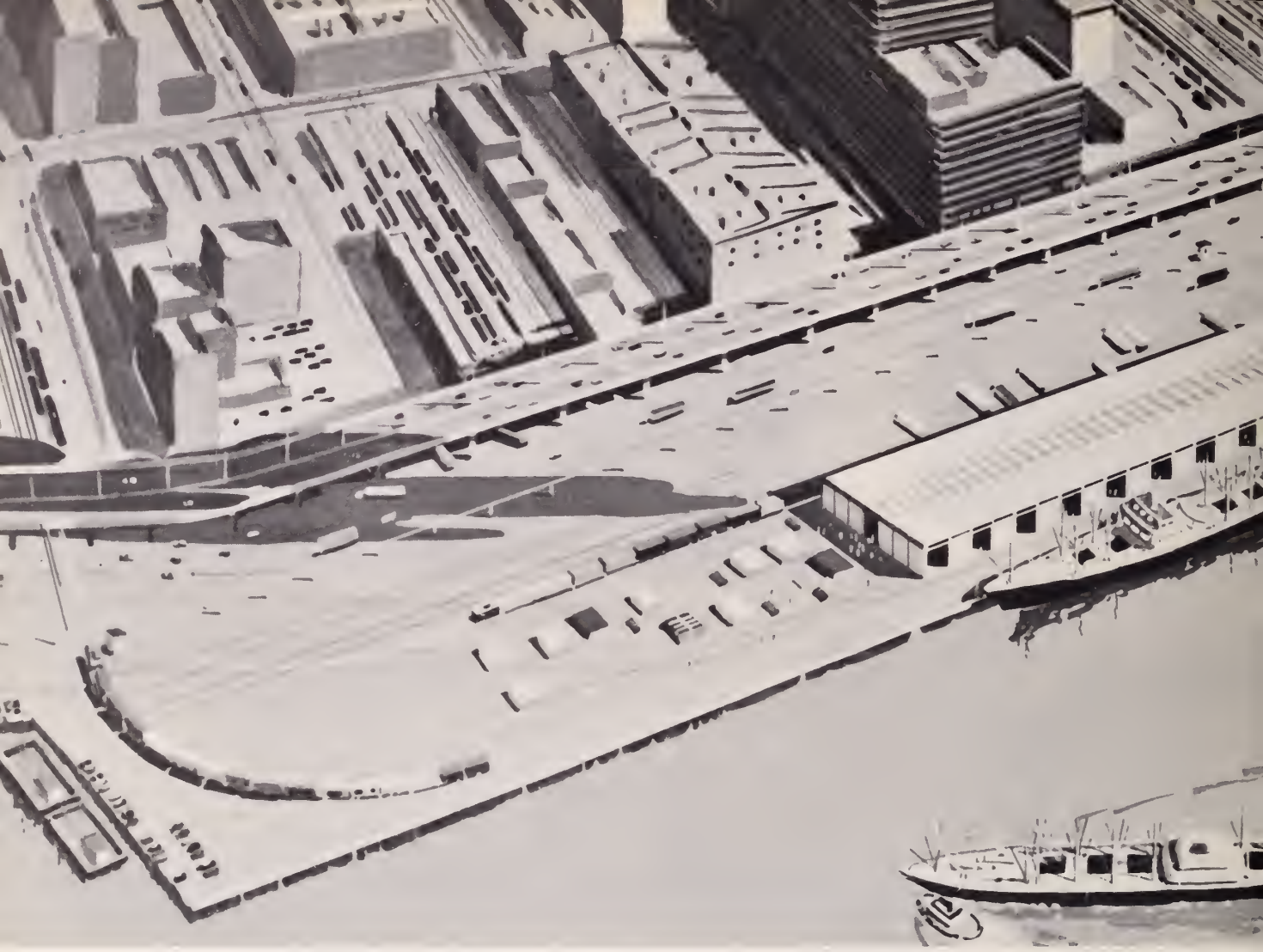
RIVER

0 250 500 1000 1500 2000 2500

SCALE IN FEET

NHATTAN

VELOPMENT PLAN



Area IV

LOWER MANHATTAN SERVICE AREA

LOCATION EXTENT: Area IV extends 650 feet from Gansevoort Street to Little West 12th Street, covers approximately 12 gross acres with 520,000 square feet of gross area and includes Piers 52, 53, the Department of Sanitation Gansevoort facility, and Marine Fire Station #2.

PROPOSED USE: Municipal services and open wharfage.

AREA HIGHLIGHTS: Piers 52 and 53 are planned to service the industries located or operating within the City of New York. These piers will be replaced with new structures for open wharfage-type waterfront services. Berths lengths up to 800 feet will accommodate all ships expected to use these two piers.
COST: Estimated total construction cost $2,000,000 (1962 value).

Area V

LOCATION: Area V, the longest development area, extends 7,120 feet from Little West 12th Street to West 37th Street, covers 110 gross acres and includes the new Pier 76 (under construction) and its two planned companion piers, Nos. 72 and 74, as an integral part of the overall plan.

PROPOSED USE: Area V is the Midtown Distribution Center. This strategically located area will become the upper limit of the major cargo shipping and distribution complex extending from Chambers Street to West 37th Street. The plan calls for improved marginal street and a north-south express highway connection for trucks in the vicinity of the Holland and Lincoln Tunnels.

MIDTOWN DISTRIBUTION CENTER Little West 12th Street to West 37th Street

AREA HIGHLIGHTS: Modern cargo terminals could be tied in with existing inland railroad yards. The complete program calls for 20 modern and efficient cargo berths, together with improved facilities for traffic, parking, and all other necessary waterfront activities, replacing seventeen outdated finger piers.

Wharf Facilities: Average berth lengths are well over 600 feet — some up to 800 feet. Planning anticipates future trends in ship design. Piersheds are of the most modern and flexible design with minimum number of columns, tail-gate height truck-loading and unloading, optimum clear height and wide aprons, modern lighting and fire protection. All cargo handling will be conducted within the piershed or farm area. Automobile parking can be provided on piershed roofs with ramps located at ground level away from critical cargo handling areas.

CONSTRUCTION: Pier development will result in 4,800,000 gross square feet of new concrete pier deck, supported on piling and wharf area extending out from 500′ to 800′ from the bulkhead line.

COST: Estimated construction costs: $61,000,000 (1962 value) for maritime uses; $8,000,000 for other uses.

PHASING: Carefully phased program protects all of the City's current assets by replacing existing structures on the termination of their economic and useful life.

SIGHTSEEING AND CONVENTION CENTER

LOCATION & EXTENT: Extends from West 37th Street to West 43rd Street – 1600′ long – 27.55 gross acres.

PROPOSED USE: A new focal point for the City's land, water and air sightseeing; visitor and general community service-type activities; and a major convention center. Adjacent to the midtown theater district and 42nd Street. Served by major midtown transportation facilities, with proposed direct connection to the subway system. Also provides a new concept in land, air and water-borne commuter transportation, in addition to sightseeing. Plan is compatible with current and projected development trends in the midtown area.

Area VI is built on a platform, the main deck extending a maximum of 775′ from the bulkhead line.

AREA HIGHLIGHTS: *Convention Hall – Arena:* This structure, at south end of the Area, contains 144,500 square feet (plus 22,700 square feet of storage). The building is approximately 150′ high. Elevators ring the outside perimeter. Contains an oval-shaped arena. Total seating capacity 20,000 to 23,000 persons. Arena floor is 100′ by 270′.

Observation Tower: North of Convention Hall – Arena, at the head of 42nd Street, provides a 550-foot-high landmark, visible for miles. Observation decks, restaurant at top levels.

Parking: South of Convention Hall – Arena. The area would have large parking facilities. City bus terminal for many City and visitor buses at street or first level, connected by ramps to upper parking levels and feeding directly to Convention Hall – Arena. All bus and automobile parking is self-contained, completely separated from street traffic.

West 37th Street to West 43rd Street

Public Esplanade and Recreation Area: South of the Convention Hall – Arena, a platform located on Plaza level, 40′ above the street extends over the entire Area. A modern, attractive esplanade surrounds the Convention Hall – Arena area.

Helistop: At south end of Convention Hall – Arena, 70′ above the ground and 30′ above the Plaza or Public Promenade and Recreation Area Level. Provides opportunity for helicopter vertical take-off and landing craft to tie in with transatlantic steamship lines; hydrofoil commuter ships. Connects with all other helicopter landing points within the City and region. Vertical take-off passengers will be served by a modern, efficient air terminal located below on the Plaza or Public Promenade and Recreation Area Level.

Water Sightseeing and Commuter Facilities: Eight slips for berthing 16 sightseeing boats and/or hydro-foil commuter craft, will be available. Also provides for 660′ of wharfside berthing at north and south ends of Area VI for exposition or trade ships or large excursion ships.

CONSTRUCTION: It is anticipated that the entire area will rest on a pile-supported platform extending out approximately 775′ from the bulkhead line.

COST: Construction costs estimated at $3,300,000 (1962 value) for maritime uses; $84,000,000 for other uses. Carefully phased program protects all of the City's current assets by replacing existing structures on the termination of their economic and useful life.

Area VII

CONSOLIDATED PASSENGER SHIP TERMINAL

LOCATION & EXTENT: Area VII extends approximately 2,800′ or ½ mile from West 44th Street to West 54th Street and includes about 71.17 gross acres.

PROPOSED USE: This Area will provide a Consolidated Passenger Ship Terminal – a completely new and unique concept in overall steamship passenger processing – designed for comfort and convenience. Improved, speedier baggage handling, sorting and control will be major features of the entire complex. The new terminal concept will eliminate the outmoded conditions of which ship travellers have complained.

AREA HIGHLIGHTS: *Berths:* Twelve berths are planned for the new Consolidated Passenger Ship Terminal area: a maximum of 8 berths for ships up to 800′ in length; a minimum of 4 berths for ships over 800′ in length.

Terminal: Three new terminal buildings and portions of the existing terminals make up the Consolidated Passenger Ship Terminal, combining each new structure 250′ wide and 400′ long with the existing pier structures, to provide a huge terminal 650′ long.

All terminals sections are linked by a new completely separate roadway parallel but not connected to the West Side Highway.

Below each new reception hall, parking for at least 500 cars is provided on two levels.

Separate areas are provided for taxicabs, limousines and private cars for pickup and discharge of passengers in front of each reception hall and clear of through traffic.

West 44th Street to West 54th Street

CUSTOMS: *Customs Hall:* Luggage sorting and inspection areas will be most modern and effieient. All eustoms areas will be climate eontrolled for year-round comfort and will have attraetive, modern deeor, eomparable to that aboard ship.

Baggage Control: Baggage will be routed directly to the customs areas by extending the present eonveyor handling system.

Passenger Flow: Covered walkways from shipside to the Customs Hall will protect passengers in all weather. The use of telescopie, adjustable and covered gangways will also be included .

Offices: Modern offices for key customs and steamship company personnel will be provided above the Customs Hall at the mezzanine level overlooking the existing terminals.

Concessions: It is anticipated that eoneessions (e.g., florist shop, snaek bar, bank, vending machines, telephones, and many other sueh services) will be available for the eonvenienee of passengers and visitors.

CONSTRUCTION: The new terminal structures will be constructed on land fill.

COST: The total eost of the three units of the Consolidated Passenger Ship Terminal will be approximately $36,000,000, ineluding elevated ramp (1962 value).

PHASING: The Central Terminal ("B") portion will be scheduled for eompletion at the earliest possible date.

Area VIII

UPTOWN — MANHATTAN SERVICE AREA

LOCATION & EXTENT: Area VIII extends 1,380 feet from West 54th Street to West 59th Street and covers 24.10 gross acres.
PROPOSED USE: Service area for mid-Manhattan.
AREA HIGHLIGHTS: Area VIII is reserved for water-borne services essential to the City's life and growth. Piers now serving the Consolidated Edison Company and the Sanitation Department are in this class. Marine Fire Department Unit #3 is planned for this service area. New wharf and pier facilities will provide improved open-wharfage-type waterfront services. This Service Area will be approximately 1,000,000 gross square feet from pierhead line to bulkhead line.
COST: Estimated total construction cost $5,300,000 (1962 value).

Area IX

TRANSPORTATION — RECREATION AREA

LOCATION & EXTENT: Area IX extends 3,260 feet from West 59th Street to West 72nd Street and covers about 46 gross acres.
PROPOSED USE: Area IX is reserved for two large new passenger piers (Nos. 104 and 106), planned prior to the inception of the study.

These modern piers, of advanced design, will provide improved conditions. Visitors' galleries above the passenger area will be provided. Modern customs inspection areas are included.

Access to this development for passenger cars, taxis and light baggage trucks will be an overhead connecting highway from the foot of West 70th Street over the New York Central freight yard to the second (or passenger) level of the pier. The lower level will be connected to an access highway for cargo truck operations.

Pier 106 is currently in negotiation with one of the largest transatlantic passenger ship operators.

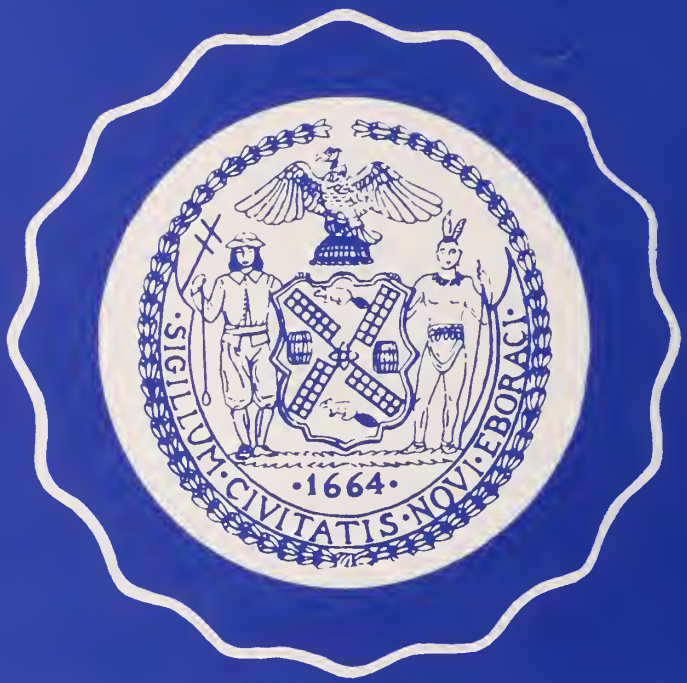
ALTERNATE PLAN: Should the existing plan not materialize, an alternate plan calls for transportation and recreation facilities in the area. The alternate plan provides for land fill to accommodate parks, helistop, vertical-take-off facilities and marinas.

The land fill would extend out from the bulkhead line approximately 700-800 feet, depending on the final arrangement. The area will contain approximately 2,130,000 gross square feet, with some additional area available upland beyond the bulkhead line.

COST: Estimated construction costs (1962 value):

Existing Plan: $33,000,000 for maritime uses.
$ 8,000,000 for other uses.

Alternate Plan: $ 3,500,000 for maritime uses.
$11,500,000 for other uses.


·SIGILLUM·CIVITATIS·NOVI·EBORACI·
·1664·